

FORM PTO-1449
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U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

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SERIAL NO.: 10/735,934

LIST OF PRIOR ART CITED BY APPLICANT
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APPLICANT: Al x Nug nt

FILING DATE: 12/15/2003

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Not Yet Assigned

2129

U. S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (if appropriate)
MC	US 2003/0177450 A1	9/18/2003	Nugent	716	1	03/12/2002
MC	US 2002/0102353 A1	8/1/2002	Mauthner et al.	427	255.28	3/20/2002
MC	US 6,426,134 B1	7/30/2002	Lavin et al.	428	300.1	6/29/1999
MC	US 6,424,961 B1	7/23/2002	Ayala	706	25	12/6/1999
MC	US 6,423,583 B1	7/23/2002	Avouris et al.	438	132	1/3/2001
MC	US 6,422,450 B1	7/23/2002	Zhou et al.	228	121.85	9/15/2000
MC	US 6,420,092 B1	7/16/2002	Yang et al.	430	311	10/13/1999
MC	US 6,418,423 B1	7/9/2002	Kambhatla et al.	706	15	1/29/1999
MC	US 6,407,443 B2	6/18/2002	Chen et al.	257	616	6/20/2001
MC	US 2002/0090468 A1	6/11/2002	Goto et al.	427	580	10/30/2001
MC	US 6,389,404 B1	5/14/2002	Carson et al.	706	18	12/30/1998
MC	US 6,383,923 B1	5/7/2002	Brown et al.	438	666	8/22/2000
MC	US 6,363,369 B1	3/26/2002	Liaw et al.	706	15	6/11/1998
MC	US 6,359,288 B1	3/19/2002	Ying et al.	257	14	4/22/1998
MC	US 2002/0030205 A1	3/14/2002	Varshavsky	257	208	8/9/1999
MC	US 6,339,227 B1	1/15/2002	Ellenbogen	257	40	2/1/1999
MC	US 2002/0004136 A1	1/10/2002	GAO et al.	428	367	6/14/1999
MC	US 2002/0001905 A1	1/3/2002	Choi et al.	438	268	6/27/2001
MC	US 6,335,291 B1	1/1/2002	Freeman	438	706	11/24/1999
MC	US 6,330,553 B1	12/11/2001	Uchikawa et al.	706	2	4/9/1998
MC	US 2001/0044114 A1	11/22/2001	Connolly	435	6	5/17/2001
MC	US 6,314,019 B1	11/6/2001	Kuekes et al.	365	151	3/29/1999
MC	US 6,282,530 B1	9/28/2001	Huang	706	41	6/9/1999
MC	US 2001/0023986 A1	9/27/2001	Mancevski	257	741	2/7/2001
MC	US 2001/0024633 A1	9/27/2001	Lee et al.	423	447.3	3/15/2001
MC	US 6,294,450 B1	9/25/2001	Chen et al.	438	597	3/1/2000
MC	US 2001/0004471 A1	6/21/2001	Zhang	427	372.2	12/18/2000
MC	US 6,248,529 B1	6/19/2001	Connolly	435	6	5/20/1999
MC	US 6,256,767 B1	7/3/2001	Kuekes et al.	716	9	3/29/1999
MC	US 6,245,630 B1	6/12/2001	Ishikawa	438	393	5/29/1998
MC	US 6,128,214	10/3/2000	Kuekes et al.	365	151	5/29/1999
MC	US 6,026,358	2/15/2000	Tomabechi	704	232	12/21/1995
MC	US 5,978,782	11/2/1999	Neely	706	16	7/5/1996
MC	US 5,951,881	9/14/1999	Rogers et al.	216	41	7/22/1996
MC	US 5,904,545	5/18/1999	Smith et al.	438	455	6/7/1995
MC	US 5,812,993	9/22/1998	Ginosar et al.	706	26	2/27/1997
MC	US 5,783,840	7/21/1998	Randall et al.	257	24	6/7/1995
MC	US 5,717,832	2/10/1998	Steimle et al.	395	24	6/7/1995

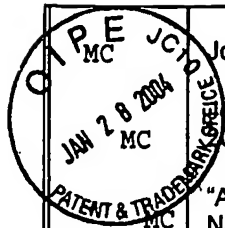
MC	MC	US 5,649,063	7/15/1997	Bose	395	22	12/16/1994
		US 5,589,692	12/31/1996	Reed	257	23	4/11/1995
	MC	US 5,475,794	12/12/1995	Mashiko	395	24	8/17/1994
	MC	US 5,422,983	6/6/1995	Castelaz et al.	395	24	7/19/1993
	MC	US 4,988,891	1/29/1991	Mashiko	307	201	9/13/1989
	MC	US 4,974,146	11/27/1990	Works et al.	364	200	5/6/1988
	MC	US 4,802,951	2/7/1989	Clark et al.	156	630	12/23/1987

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
MC	EP 1 134 304 A2	9/19/2001	EPO	C23C	16/44		
MC	EP 1 115 135 A1	7/11/2001	EPO	H01J	9/02		
MC	EP 1 100 106 A2	5/16/2001	EPO	H01J	1/304		
MC	EP 1 069 206 A2	7/3/2001	EPO	C23C	16/26		
MC	EP 1 046 613 A2	4/25/2000	EPO	C01B	31/00		
MC	EP 1 022 764 A1	1/19/2000	EPO	H01J	9/02		

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

MC	Peter Weiss, "Circuitry in a Nanowire: Novel Growth Method May Transform Chips," Science News Online, Vol. 161, No. 6; 9 Feb 2002
MC	Press Release, "Nanowire-based electronics and optics comes one step closer," Eureka Alert, American Chemical Society; 1 Feb 2002
MC	Weeks et al., "High-pressure nanolithography using low-energy electrons from a scanning tunneling microscope," Institute of Physics Publishing, Nanotechnology 13 (2002), pp. 38-42; 12 December 2001
MC	CMP Cientifica, "Nanotech: the tiny revolution"; CMP Cientifica, Nov. 2001
MC	Diehl, et al., "Self-Assembled, Deterministic Carbon Nanotube Wiring Networks," Angew. Chem. Int. Ed. 2002, 41, No. 2; Received Oct. 22, 2001
MC	G. Pirio, et al., "Fabrication and electrical characteristics of carbon nanotube field emission microcathodes with an integrated gate electrode," Institute of Physics Publishing, Nanotechnology 13 (2002), pp. 1-4, 2 October 2001
MC	Leslie Smith, "An Introduction to Neural Networks," Center for Cognitive and Computational Neuroscience, Dept. of Computing & Mathematics, University of Stirling, 25 October 1996; http://www.cs.stir.ac.uk/~lss/NNIntro/InvSlides.html
MC	V. Derycke et al., "Carbon Nanotube Inter- and Intramolecular Logic Gates," American Chemical Society, Nano Letters, XXXX, Vol 0, No. 0, A-D
MC	Mark K. Anderson, "Mega Steps Toward the Nanochip," Wired News, 27 April 2001
MC	Collins et al., "Engineering Carbon Nanotubes and Nanotube Circuits Using Electrical Breakdown," Science, Vol 292, pp. 706-709, April 27, 2001
MC	Landman et al., "Metal-Semiconductor Nanocontacts: Silicon Nanowires," Physical Review Letters, Vol. 85, No. 9, 28 August 2000



- John G. Spooner, "Tiny tubes mean big chip advances," Cnet News.com, Tech News First, 26 April 2001
- Seong-Mi Moon et al., "High-Yield Purification Process of Singlewalled Carbon Nanotubes," J. Phys. Chem. B 2001, 105, pp. 5677-5681
- "A New Class of Nanostructure: Semiconducting Nanobelts Offer Potential for Nanosensors and Nanoelectronics," March 12, 2001, <http://www.sciencedaily.com/releases/2001/03/010309080953.htm>
- MC Hermanson et al., "Dielectrophoretic Assembly of Electrically Functional Microwires from Nanoparticle Suspensions," Materials Science, Vol. 294, No. 5544, Issue of 2 Nov 2001, pp. 1082-1086
- MC Press Release, "Toshiba Demonstrates Operation of Single-Electron Transistor Circuit at Room Temperature," Toshiba, January 10, 2001
- MC J. Appenzeller et al., "Optimized contact configuration for the study of transport phenomena in ropes of single-wall carbon nanotubes," Applied Physics Letters, Vol. 78, No. 21, pp. 3313-3315, 21 May 2001
- MC David Rotman, "Molecular Memory, Replacing silicon with organic molecules could mean tiny supercomputers," Technology Review, May 2001, pg. 46
- MC Westervelt et al., "Molecular Electronics," NSF Functional Nanostructures Grant 9871810, NSF Partnership in Nanotechnology Conference, Jan. 29-30, 2001; http://www.unix.oit.umass.edu/~nano/NewFiles/FN19_Harvard.pdf
- MC Niyogi et al., "Chromatographic Purification of Soluble Single-Walled Carbon Nanotubes (s-SWNTs)," J. Am. Chem. Soc 2001, 123, pp. 733-734, Received July 10, 2000
- MC Duan et al., "Indium phosphide nanowires as building blocks for nanoscale electronic and optoelectronic devices," Nature, Vol. 409, January 4, 2001, pp. 67-69
- MC Paulson, et al., "Tunable Resistance of a Carbon Nanotube-Graphite Interface," Science, Vol. 290, 1 December 2000, pp. 1742-1744
- MC Wei et al., "Reliability and current carrying capacity of carbon nanotubes," Applied Physics Letters, Vol. 79, No. 8, 20 August 2001, pp. 1172-1174
- MC Collins et al., "Nanotubes for Electronics," Scientific American, Dec. 2000, pp. 62-69
- MC Avouris et al., "Carbon nanotubes: nanomechanics, manipulation, and electronic devices," Applied Surface Science 141 (1999), pp. 201-209
- MC Smith et al., "Electric-field assisted assembly and alignment of metallic nanowires," Applied Physics Letters, Vol. 77, No. 9, 28 August 2000, pp. 1399-1401
- MC Hone et al., "Electrical and thermal transport properties of magnetically aligned single wall carbon nanotube films," Applied Physics Letters, Vol. 77, No. 5, 31 July 2000, pp. 666-668
- MC Smith et al., "Structural anisotropy of magnetically aligned single wall carbon nanotube films," Applied Physics Letters, Vol. 77, No. 5, 31 July 2000, pp. 663-665
- MC Andriotis et al., "Various bonding configurations of transition-metal atoms on carbon nanotubes: Their effect on contact resistance," Applied Physics Letters, Vol. 76, No. 26, 26 June 2000, pp. 3890-3892
- MC Chen et al., "Aligning single-wall carbon nanotubes with an alternating-current electric field," Applied Physics Letters, Vol. 78, No. 23, 4 June 2001, pp. 3714-3716

MC

Bezryadin et al., "Self-assembled chains of graphitized carbon nanoparticles," Applied Physics Letters, Vol. 74, No. 18, 3 May 1999, pp. 2699-2701

MC

Bezryadin et al., "Evolution of avalanche conducting states in electrorheological liquids," Physical Review E, Vol. 59, No. 6, June 1999, pp. 6896-6901

MC

Liu et al., "Fullerene Pipes," Science, Vol. 280, 22 May 1998, pp. 1253-1255

MC

Yamamoto et al., "Orientation and purification of carbon nanotubes using ac electrophoresis," J. Phys. D: Appl. Phys 31 (1998) L34-L36

MC

Bandow et al., "Purification of Single-Wall Carbon Nanotubes by Microfiltration," J. Phys. Chem. B 1997, 101, pp. 8839-8842

MC

Tohji et al., "Purifying single walled nanotubes," Nature, Vol. 383, 24 October 1996, pp. 679

MC

Dejan Rakovic, "Hierarchical Neural Networks and Brainwaves: Towards a Theory of Consciousness," Brain & Consciousness: Proc. ECPD Workshop (ECPD, Belgrade, 1997), pp. 189-204

MC

Dave Anderson & George McNeill, "Artificial Neural Networks Technology," A DACS (Data & Analysis Center for Software) State-of-the-Art Report, Contract Number F30602-89-C-0082, ELIN: A011, Rome Laboratory RL/C3C, Griffiss Air Force Base, New York, 20 August 1992

MC

Greg Mitchell, "Sub-50 nm Device Fabrication Strategies," Project No. 890-00, Cornell Nanofabrication Facility, Electronics - Pg. 90-91, National Nanofabrication Users Network

MC

John-William DeClariss, "An Introduction to Neural Networks," <http://www.ee.umd.edu/medlab/neural/nn1.html>

MC

"Neural Networks," StatSoft, Inc., <http://www.statsoftinc.com/textbook/stevnet.html>

MC

Stephen Jones, "Neural Networks and the Computation Brain or Matters relating to Artificial Intelligence," The Brain Project, http://www.culture.com.au/brain_proj/neur_net.htm

MC

David W. Clark, "An Introduction to Neural Networks"; <http://members.home.net/neuralnet/introtonn/index.htm>

MC

"A Basic Introduction to Neural Networks"; <http://blizzard.gis.uiuc.edu/html/docs/Neural/neural.html>

MC

Meyer et al., "Computational neural networks: a general purpose tool for nanotechnology," Abstract, 5th Foresight Conference on Molecular Nanotechnology; <http://www.foresight.org/Conferences/MNT05/Abstracts/Meyeabst.html>

MC

Saito et al., "A 1M Synapse Self-Learning Digital Neural Network Chip," ISSCC, pp. 6.5-1 to 6.5-10, IEEE 1998

Espejo, et al., "A 16 x 16 Cellular Neural Network Chip for Connected Component Detection," 30 June 1999; <http://www.imse.cnm.csic.es/Chipcat/espejo/chip-2.pdf>

MC

Pati et al., "Neural Networks for Tactile Perception," Systems Research Center and Dept. of Electrical Engineering, University of Maryland and U.S Naval Research Laboratory. 1987; http://www.isr.umd.edu/TechReports/ISR/1987/TR_87-123/TR_87-123.phtml ✓

MC

Osamu Fujita, "Statistical estimation of the number of hidden units for feedforward neural networks," Neural Networks 11 (1998), pp. 851-859 ✓

MC

Abraham Harte, "Liquid Crystals Allow Large-Scale Alignment of Carbon Nanotubes," CURJ (Caltech Undergraduate Research Journal), Nov. 2001, Vol. 1, No. 2, pp. 44-49

MC

"Quantum-Dot Arrays for Computation," ORNL Review Vol. 34, No. 2, 2001, pp. 1-5

MC

http://www.ornl.gov/ORNLReview/v34_2_01/arrays.htm

MC

Jabri, M.A. et al., "Adaptive Analog VLSI Neural Systems," Chapman & Hall, London SE1 8HN, UK, 1996, pp. 92-95.

MC

Lipson et al., "Automatic Design and Manufacture of Robotic Lifeforms," NATURE, Vol. 406, 31 August 2000, pp.974-978

MC

A. Bezryadin, et al., "Evolution of Avalanche Conducting States in Electrorheological Liquids," The American Physical Society, June 1999, Volume 59, Number 6, pp. 6896-6901

MC

Kunitoshi Yamamoto, et al., "Rapid Communication Orientation and Purification of Carbon Nanotubes Using AC Electrophoresis", J. Phys. D. Appl. Phys 31 (1998) L34-L36

MC

E.S. Snow, et al., "Random networks of carbon nanotubes as electronic material", Applied Physics Letters, Volume 82, Number 12, March 31, 2003, pp. 2145-2147

MC

R. Martel, et al., "Ambipolar Electrical Transport in Semiconducting Single-Wall Carbon Nanotubes," Physical Review Letters, Vol. 87, No. 25, 17 December 2001, pp. 256805-1 to 256805-4

MC

S. Heinze, et al., "Carbon Nanotubes as Schottky Barrier Transistors", Vol. 89, No. 10, 2 September 2002, pp. 106801-1 to 106801-4

MC

M. Dubson, et al., "Measurement of the conductivity exponent in two-dimensional percolating networks: square lattice versus random-void continuum", Physical Review B, Vol. 32, No. 11, 1 December 1985, pp. 7621-7623

MC

D.J. Frank, et al., "Highly efficient algorithm for percolative transport studies in two dimensions", Physical Review B, Vol. 37, No. 1, 1 January 1988, pp. 302-307

MC

Uma R. Karmarkar, et al., "Mechanisms and significance of spike-timing dependent plasticity," Biol. Cybern. 87, 373-382 (2002), January 28, 2002

MC

Uma R. Karmarkar, et al., "A Model of Spike-Timing Dependent Plasticity: One or Two Coincidence Detectors?", J. Neurophysiol, Vol. 88, pp. 507-513, July 2002

MC

M.C.W. van Rossum, et al., "Stable Hebbian Learning from Spike-Timing-Dependent Plasticity", The Journal of Neuroscience, December 1, 2003, 20(23), pp. 8812-8821

MC

Xiaohui Xie, et al., "Spike-based learning rules and stabilization of persistent neural activity,"

MC

Nace L. Golding, et al., "Dendritic spikes as a mechanism for cooperative long-term potentiation", NATURE, Vol. 418, 18 July 2002, pp. 326-330

MC

Ozgur Turel, et al., "Possible nanoelectronic implementation of neuromorphic networks", Dept. of Physics and Astronomy, Stony Brook University

MC

V.C. Moore, et al., "Individually Suspended Single-Walled Carbon Nanotubes in Various Surfactants," Nano Letters, 2003, Vol. 3; Sept. 9, 2003; American Chemical Society, pp. 1379-1382

MC

J.M. Tour, et al., "NanoCell Electronic Memories," J.Am.Chem.Soc. 2003, 125, pp. 13279-13283

MC

J. Zaumseil, et al., "Three-Dimensional and Multilayer Nanostructures Formed by Nanotransfer Printing," Nano Letters, 2003, Vol. 3, No. 9; July 31, 2003, American Chemical Society, pp. 1223-1227

MC

Charles D. Schaper, "Patterned Transfer of Metallic Thin Film Nanostructures by Water-Soluble Polymer Templates," Nano Letters, 2003, Vol. 3, No. 9; July 26, 2003, American Chemical Society, pp. 1305-1309

MC

C.A. Dyke, et al., "Unbundled and Highly Functionalized Carbon Nanotubes from Aqueous Reactions," Nano Letters, 2003, Vol. 3, No. 9; August 19, 2003, American Chemical Society, pp. 1215-1218

MC

J. Chung, et al., "Nanoscale Gap Fabrication by Carbon Nanotube-Extracted Lithography (CEL)", Nano Letters, 2003, Vol. 3, No. 8; July 9, 2003, American Chemical Society, pp. 1029-1031

MC

O. Harnack, et al., "Rectifying Behavior of Electrically Aligned ZnO Nanorods," Nano Letters, 2003, Vol. 3, No. 8; June 24, 2003, American Chemical Society, pp. 1097-1101

MC

M. S. Kumar, et al., "Influence of electric field type on the assembly of single walled carbon nanotubes," Chemical Physics Letters 383 (2004), December 2, 2003; pp. 235-239

MC

S.W. Lee, et al., "Dielectrophoresis and electrohydrodynamics-mediated fluidic assembly of silicon resistors," Applied Physics Letters, Vol. 83, No. 18, 3 November 2003, pp. 3833-3835

MC

R. Krupke, et al., "Simultaneous Deposition of Metallic Bundles of Single-walled Carbon Nanotubes Using Ac-dielectrophoresis," Nano Letters, 2003, Vol. 3, No. 8; July 9, 2003; American Chemical Society, pp. 1019-1023

MC

K. Bradley, et al., "Flexible Nanotube Electronics," Nano Letters, 2003, Vol. 3, No. 10; August 9, 2003, American Chemical Society, pp. 1353-1355

MC

T.B. Jones, "Frequency-dependent orientation of isolated particle chains," Journal of Electrostatics, 25 (1990), Elsevier Science Publishers, pp. 231-244

MC

L.A. Nagahara, "Directed placement of suspended carbon nanotubes for nanometer-scale assembly," Applied Physics Letters, Vol. 80, No. 20; May 20, 2003; pp. 3826-3828

MC

A. Bezryadin, et al., "Electrostatic trapping of single conducting nanoparticles between electrodes," Applied Physics Letters, 71 (9), 1 September 1997, pp. 1273-1275

MC

S. Suzuki, et al., "Quantitative Analysis of DNA Orientation in Stationary AC Electric Fields Using Fluorescence Anisotropy," IEEE Transactions of Industry Applications, Vol. 34, No. 1; January/February 1998, pp. 75-83

MC

Phaedon Avouris, "Molecular Electronics with Carbon Nanotubes," Accounts of Chemical Research, Vol. 35, No. 12; July 31, 2002, pp. 1025-1034

MC

X. Liu, et al., "Electric-Field Induced Accumulation and Alignment of Carbon Nanotubes," 2002 Annual Report Conference on Electrical Insulation and Dielectric Phenomena, pp. 31-34

MC

R. Krupke, et al., "Contacting single bundles of carbon nanotubes with alternating electric fields," Appl. Phys. A, 76, 28 October 2002, pp. 397-400

MC

M. Law, et al., "Photochemical Sensing of NO₂ with SnO₂ Nanoribbon Nanosensors at Room Temperature," Angew. Chem. 2002, 114, Nr. 13, pp. 2511-2514

MC

J. Tour, et al., "Nanocell Logic Gates for Molecular Computing," IEEE Transactions on Nanotechnology, Vol. 1, No. 2, June 2002, pp. 100-109

MC

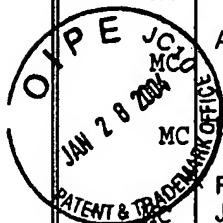
A. Leonardi, et al., "Simulation methodology for dielectrophoresis in microelectronic Lab-on-a-chip," Modeling and Simulation of Microsystems 2002, pp. 96-99

MC

J. Chung, et al., "Nanoscale Gap Fabrication and Integration of Carbon Nanotubes by Micromachining," Solid-State Sensor, Actuator and Microsystems Workshop, June 2-6, 2003; Hilton Head Island, South Carolina, pp. 161-164

MC

L. Zheng, et al., "Towards Single Molecule Manipulation with Dielectrophoresis Using Nanoelectrodes," IEEE-NANO 2003, August 12-14, 2003, Moscone Convention Center, San Francisco, CA; pp. 437-440,



MC

http://ieeenano2003.arc.nasa.gov/program_contents.pdf

A. van Schaik, "Building blocks for electronic spiking neural networks," Neural Networks 14 (2001), pp. 617-628

V.C. Moore, et al., "Individually Suspended Single-Walled Carbon Nanotubes in Various Surfactants," Nano Letters, 2003, Vol. 3, No. 10; American Chemical Society; September 8, 2003; pp. 1379-1382

R. Krupke, "Separation of Metallic from Semiconducting Single-Walled Carbon Nanotubes," Science, Vol. 301; 18 July 2003; pp. 344-347

MC

Wolfgang Maass, "On the Relevance of Time in Neural Computation and Learning," In M. Li and A. Maruoka, editors, *Proc. of the 8th International Conference on Algorithmic Learning Theory in Sendai (Japan)*, volume 1316 of *Lecture Notes in Computer Science*, pages 364-388. Springer (Berlin), 1997.

MC

Wolfgang Maass, "Noisy Spiking Neurons with Temporal Coding have more Computational Power than Sigmoidal Neurons," In M. Mozer, M. I. Jordan, and T. Petsche, editors, *Advances in Neural Information Processing Systems*, volume 9, pages 211-217. MIT Press (Cambridge), 1997. (pp. 1-13, including Appendix)

MC

L. Perrinet, et al., "Emergence of filters from natural scenes in a sparse spike coding scheme," Neurocomputing, 2003, pp. 1-14, <http://www.laurent.perrinet.free.fr/publi/perrinet03neurocomputing.pdf>

MC

L. Perrinet, et al., "Coherence detection in a spiking neuron via Hebbian learning," Neurocomputing, 2002, Volume 44-46, No. C., pp. 817-822, <http://www.laurent.perrinet.free.fr/publi/perrinet02.pdf>

MC

A. Jarosz, et al., "An Introductory Note on Gaussian Correlated Random Matrix," February 21, 2003, pp. 1-20 <http://www.if.ui.edu.pl/pl/koloSMP/prace/mdmatrix.pdf>

MC

K. Bradley, et al., "Influence of Mobile Ions on Nanotube Based FET Devices," Nano Letters, 2003, Vol. 3, No. 5; American Chemical Society, April 4, 2003; pp. 639-641

MC

A. van Schaik, "Building blocks for electronic spiking neural networks," Neural Networks 14 (2001), pp. 617-628

EXAMINER

/Michael Caldwell/

DATE CONSIDERED

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APPLICANT: Alex Nugent

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GROUP ART UNIT: 2121

U. S. PATENT DOCUMENTS

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MC	5,706,404	01/06/1998	Colak	395	24	07/30/1996
MC	5,315,162	05/24/1994	McHardy et al.	307	201	10/04/1991

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
MC	WO 00/44094	07/27/2000	WIPO	H03K	19/00	YES	

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

MC	PCT Notification of Transmittal of the International Search Report or the Declaration, Date of Mailing June 4, 2004
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EXAMINER	/Michael Caldwell/	DATE CONSIDERED	04/18/2006
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MC	US 2,707,223	04-1955	Hollman, Hans E	338	32R	
MC	US 3,833,894	09-1974	Aviram et al.	365	151	
MC	US 4,926,064	05-1990	Tapang, Carlos C.	706	26	
MC	US 5,670,818	09-1997	Forouhi et al.	257	530	
MC	US 5,761,115	06-1998	Kozicki et al.	365	182	
MC	US 5,896,312	04-1999	Kozicki et al.	365	153	
MC	US 5,914,893	06-1999	Kozicki et al.	365	107	
MC	US 6,084,796	07-2000	Kozicki et al.	365	153	
MC	US 2001/0031900	10-2001	Margrave, et al.	570	126	
MC	US 2001/0041160	11-2001	Margrave, et al.	423	460	
MC	US 2002/0004028	01-2002	Margrave et al.	423	447.3	
MC	US 2002/0075126	06-2002	Reitz, et al.	338	21	
MC	US 2002/0086124	07-2002	Margrave et al.	428	36.9	
MC	US 2003/0031438	02-2003	Kambe et al.	385	122	
MC	US 6,620,346	09-2003	Schultz et al.	252	519.51	
MC	US 6,798,692	09-2004	Kozicki et al.	365	174	
MC	US 6,855,329	02-2005	Shakesheff, et al.	424	409	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO
MC	RU 2071126 C1	06-1996	Russia	G11C	13/02	NO
MC	WO 03/017282 A1	08-2001	PCT	G11C	11/21	YES

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, Etc.)

MC	<u>Nanoparticles Get Wired</u> , Dimes Institute, Delft University of Technology, 1997
MC	A. Bezryadin, <u>Trapping Single Particle with Nanoelectrodes</u> , Physics News Graphics, September 1997
MC	Snow, et al., <u>Nanofabrication with Proximal Probes</u> , Proceedings of the IEEE, April 1997
MC	P. O'Connor, G. Gramegna, P. Rehak, F. Corsi, C. Marzocca, <u>CMOS Preamplifier with High Linearity and Ultra Low Noise for X-Ray Spectroscopy</u> , IEEE Transactions on Nuclear Science, Vol. 44, No. 3, June 1997, pp. 318-325

EXAMINER /Michael Caldwell/

DATE CONSIDERED

04/18/2006

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

